

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB 03/05497

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F1/32 G11B7/00 G11B33/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 625 615 A (DENTE JAMES J ET AL) 29 April 1997 (1997-04-29) column 5 - column 7	1-12
A	EP 1 221 645 A (HEWLETT PACKARD CO) 10 July 2002 (2002-07-10) column 3 - column 4	1-12
A	US 5 355 502 A (SCHOWE LESTER ET AL) 11 October 1994 (1994-10-11) column 3 - column 4	1-12
A	US 5 167 024 A (HANLON MIKE S ET AL) 24 November 1992 (1992-11-24) column 7 - column 8	1-12
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

8 document member of the same patent family

Date of the actual completion of the international search

1 March 2004

Date of mailing of the international search report

12/03/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Damp, S

INTERNATIONAL SEARCH REPORT

International Publication No

PCT/IB 03/05497

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 521 896 A (BAJOREK CHRISTOPHER H ET AL) 28 May 1996 (1996-05-28) column 5 - column 6	1-12
A	US 6 115 337 A (TAKAGI HIROHITO ET AL) 5 September 2000 (2000-09-05) the whole document	1-12
A	US 2002/169928 A1 (KIMURA TETSURO ET AL) 14 November 2002 (2002-11-14) the whole document	1-12

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB 03/05497

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5625615	A	29-04-1997	NONE	
EP 1221645	A	10-07-2002	US 2002087225 A1 EP 1221645 A2 JP 2002287859 A	04-07-2002 10-07-2002 04-10-2002
US 5355502	A	11-10-1994	NONE	
US 5167024	A	24-11-1992	AU 629019 B2 AU 6016890 A CA 2024552 A1 DE 4028175 A1 GB 2235797 A ,B HK 36394 A JP 3171317 A SE 9002838 A SG 7294 G	24-09-1992 14-03-1991 09-03-1991 21-03-1991 13-03-1991 29-04-1994 24-07-1991 09-03-1991 10-06-1994
US 5521896	A	28-05-1996	US 5452277 A US 5544138 A JP 2557202 B2 JP 7210975 A	19-09-1995 06-08-1996 27-11-1996 11-08-1995
US 6115337	A	05-09-2000	DE 4445012 A1 DE 4445023 A1 CN 1132908 A ,B DE 59510107 D1 EP 0717406 A1 ES 2173936 T3 JP 8273295 A US 5943307 A CN 1132910 A ,B DE 59509426 D1 EP 0717408 A1 ES 2160659 T3 JP 8235772 A US 5995460 A	20-06-1996 20-06-1996 09-10-1996 18-04-2002 19-06-1996 01-11-2002 18-10-1996 24-08-1999 09-10-1996 23-08-2001 19-06-1996 16-11-2001 13-09-1996 30-11-1999
US 2002169928	A1	14-11-2002	JP 2001100921 A CN 1290893 A EP 1089159 A2 TW 484052 B US 6415359 B1	13-04-2001 11-04-2001 04-04-2001 21-04-2002 02-07-2002